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AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO:
09/100,624	06/19/98	PHAN	D 7187

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IM22/0105

EXAMINER

PRATT, C

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 01/05/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No. 09/100,624	Applicant(s) PHAN, DEAN VAN
	Examiner Christopher C. Pratt	Art Unit 1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- 1) Responsive to communication(s) filed on 12 October 1999.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-25 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-25 is/are rejected.  
 7) Claim(s) 1-8 is/are objected to.  
 8) Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 01 September 1998 is/are objected to by the Examiner.  
 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.  
 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
 a) All b) Some \* c) None of the CERTIFIED copies of the priority documents have been:  
 1. received.  
 2. received in Application No. (Series Code / Serial Number) \_\_\_\_\_.  
 3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- |   |  |
|---|--|
| 14) <input type="checkbox"/> Notice of References Cited (PTO-892)                                     | 17) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 15) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                 | 18) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 16) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. | 19) <input type="checkbox"/> Other: _____                                    |

Art Unit: 1771

## DETAILED ACTION

### ***Drawings***

1. The corrected or substitute drawings were received on 9/1/98. These drawings are not acceptable, because figures 1 and 2 are labeled 2 and 2.

### ***Claim Objections***

Claims 1-8 objected to because of the following informalities: the word "belt" in line 1 of claim 1 should be lower case. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 9, and 16 (last line) the "whereby" phrase is indefinite as to scope, because it is unclear if this is intended to be a positive claim limitation. Note that it has been held that the functional "whereby" statement does not define any structure and accordingly can not serve to distinguish. *In re Mason*, 114 USPQ 127, 44 CCPA 937 (1957). This word should be replaced with "wherein."

Claim 4 is indefinite because it recites the limitation "hydraulic connection." The accepted meaning of this term is: operated by the movement or force of water. If

Art Unit: 1771

applicant is attempting describe a structure which allows the passage of water it must be done with more accuracy.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-8 rejected under 35 U.S.C. 102(b) as being anticipated by Trokhan (5556509).

Trokhan's patent is concerned with the creation of a papermaking belt. Trokhan discloses the use of two laminae joined to form a paper web contacting surface and an oppositely facing second surface equivalent to applicant's "machine contacting surface (figure 2)." Trokhan also discloses a first lamina comprising a reinforcing structure and a patterned framework (fig. 2, 240 and 260, respectively), as well as a second lamina comprising a secondary base and a batting joined thereto (fig. 2, 244 and 232, respectively). Trokhan discloses a patterned framework comprising an essentially continuos network of photosensitive resin extending outwardly from said reinforcing structure (fig. 2) at least about .05 millimeters (col. 7, lines 5-17). Trokhan further discloses a means in which said papermaking belt will transport water throughout said first and second laminae (col. 7, lines 45-55). This means is provided by said batting extending through said reinforcing structure by a needling process (col. 7, lines 35-45),

Art Unit: 1771

and is deemed equivalent to applicant's hydraulic connection (see 112 rejection above). Trokhan further discloses said batting with a basis weight of 800 to 100 grams per square meter (col. 7, line 60).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Trokhan (556509) in view of Trokhan (5624790).

Trokhan's ('09) patent is concerned with the creation of a papermaking belt. Trokhan discloses most elements of applicant's claims 9-25 as stated above in 102 rejections. Trokhan also discloses a continuos resin network covering from 20-60% of a paper web contacting surface (col. 12, lines 15-20). Trokhan also discloses an imprinting pattern disposed on a first surface of said first laminate and said imprinting member being imprintable upon a paper web during papermaking (figure 10 and col. 15, lines 19-27). However, Trokhan fails to teach the use of said first laminae comprising a layer of woven warp and weft yarns providing discrete imprinting knuckles forming said web-contacting surface. Trokhan also fails to teach a second layer of woven warp and weft yarns interposed between said first layer of woven warp and weft and said second lamina. Trokhan further fails to teach a first layer of warp and weft formed into a

Art Unit: 1771

bilaterally staggered sub-top surface-crossover weave pattern, woven to provide long knuckles oriented in the machine direction. Trokhan also fails to teach said knuckles to provide a second imprinting pattern. Trokhan also fails to teach a reinforcing structure comprising a caliper of about .279 mm to about .660mm, a square weave with a shed of 2, or an air permeability of 300 scfm to about 1100scfm.

Trokhan's (5624790) patent is concerned with the creation of textured papermaking belt. Trokhan ('90) teaches the use of a first lamina comprising a layer of woven warp and weft yarns providing discrete imprinting knuckles forming said web contacting surface (col. 14, lines 57-67). Trokhan also teaches a multiple layers of woven warp and weft yarns interposed between said first layer of woven warp and weft and said second lamina (col. 15, lines 30-37). Trokhan further teaches a bilaterally staggered sub-top surface-crossover weave pattern (col. 18, lines 45-65), woven to provide long knuckles as described in applicant's specification (col. 18, lines 34-39) oriented in the machine direction (col. 16, 50-56). Trokhan also teaches said knuckles to provide a second imprinting pattern (Fig. 23B). Trokhan also teaches a reinforcing structure having an air permeability of within applicant's range (col. 16, lines 20-25), a square weave having a shed of 2 (col. 18, lines 2-40), and a caliper of any convenient dimensions (col. 19, lines 20-23). It would have been obvious to a person of ordinary skill in the art to combine the papermaking belt of Trokhan ('09) with the additional woven layers taught by Trokhan ('90). Such a combination would have been motivated by the reasoned expectation of providing the papermaking belt of Trokhan ('09) with

Art Unit: 1771

increased strength, which still allows for dewatering machinery to adequately perform its function (col. 12, lines 55-65), as well as extending the useful life of the composite papermaking belt (col. 15, lines 33-36).

### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Pratt whose telephone number is 703-305-6559. The examiner can normally be reached on Monday - Friday from 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-308-2351 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.



Christopher C. Pratt  
December 30, 1999



BLAINE COPENHEAVER  
PRIMARY EXAMINER